

Agenda of July 27, 2005

Item No. 10.G.3
Contract No. CS-1368
Amendment No. 4
Price Increase: \$12,000,000.00

TO: The Honorable
Board of Water Commissioners
City of Detroit, Michigan

FROM: (b)(6), (b)(7)(C) Director
Water and Sewerage Department

DATE: July 27, 2005

RE: DWSD Contract No. CS-1368
"Inspection and In-Place Rehabilitation of Existing
Circular and Non-Circular Sewers"
Consultant: Inland Waters Pollution Control, Inc.

I. Motion:

Upon recommendation of (b)(6), (b)(7)(C) Deputy Director, the Board of Water Commissioners authorizes the Director to grant an increase of \$12,000,000.00 in contract price, with no change in contract time, to DWSD Contract No. CS-1368, Amendment No. 4, "Inspection and In-Place Rehabilitation of Existing Circular and Non-Circular Sewers", Inland Waters Pollution Control, Inc. (Consultant), and also authorizes the Director to take such action as may be necessary to accomplish the intent of this vote.

II. Justification:

The current contract was initiated on July 19, 2002 with Inland Waters Pollution Control, Inc. for an original price of \$50,000,000.00 and duration of three (3) years. Amendment No. 1 increased the contract price by \$10,000,000.00 with no change in contract completion time to repair existing sewers on a task order basis. Amendment No. 2 increased the contract price by \$35,000,000.00 with twelve (12) months contract time extension for repairing a massive sewer collapse at 15 Mile Road between Hayes Road and Moravian Drive in the City of Sterling Heights. Amendment No. 3 increased the contract price by \$23,000,000.00 to complete the repair of the collapsed section of DWSD sanitary interceptor located in Sterling Heights, Macomb County.

Since the start of this Contract, CS-1368, Detroit Water and Sewerage Department (DWSD) has televised approximately 635,000 feet (120.3 miles) of sewers, out of which

475,000 feet (90 miles) of sewers were rehabilitated. Also, included in this effort were: as-needed emergency point repairs; sewer restoration; catch basin cleaning; and; manhole repairs/installation at a total cost of approximately \$57,740,000.00. An additional \$2,000,000.00 has already been authorized for cleaning, lining and point repairs of the sewer system.

The current balance of approximately \$260,000.00 is insufficient to keep the contract in service until its completion date. Work on advertising two (2), new contracts (East side and West side sewer repairs) is in progress to replace CS-1368.

The existing sewer system infrastructure is very old. As a result, many of the existing sewers are deteriorated and need rehabilitation, while some are near collapse, requiring immediate repair and rehabilitation. Also, many DWSD sewer manholes are found to be in poor condition; rehabilitation using epoxy liner or equal is required to reduce infiltration and inflow (I&I) conditions. To maintain the integrity of the system, and to comply with federal regulations for sewer inspection, cleaning and rehabilitation, DWSD has accelerated the sewer rehabilitation program.

In order to provide the Department with the means necessary to continue rehabilitation work of selected existing sewers and to respond to emergencies until a new contract is in place, it is recommended that the budget for Contract CS-1368 be increased by \$12,000,000.00 without any extension of contract time.

III. Project Tasks:

Funding provided under Amendment No. 4 will be used for the following tasks:

- Provide technical and professional services for as-needed inspection, design and in-place rehabilitation of selected existing sewers and to afford DWSD the ability to respond to related emergencies in a timely fashion; and,
- Perform sewer manhole inspection and develop a program for rehabilitating sewer manholes using epoxy liner or equal to reduce infiltration and inflow (I&I) in the sewer system.

With the approval of Amendment No. 4, the contract will continue to provide technical and professional services for as-needed inspection, design and in-place rehabilitation of selected existing sewers on a prioritized sewer section complaint map generated by the Maintenance and Repair Division and at the same time responding to sewer emergencies as they arise. Video inspections of sewers are performed before they are lined and rehabilitated.

IV. Project Costs:

A. Sewer Rehabilitation Service Original Contract No. CS-1368	\$50,000,000.00
B. Amendment No.1 (date of approval Aug 25, 2004) For Existing Sewers Rehabilitation Work	\$10,000,000.00
C. Amendment No. 2 with 12 months time extension (date of approval by The City Council on Dec. 30, 2004) For work on 15 Mile Road and Hayes Road	\$35,000,000.00
D. Amendment No. 3 (under process for City Council's approval) For work on 15 Mile Road and Hayes Road	\$23,000,000.00
E. Proposed Amendment No. 4 For Existing Sewers Rehabilitation Work	\$12,000,000.00
F. Total Project Cost (TPC)	\$130,000,000.00

V. Project Management Status:

A. Start Work Date	July 19, 2002
B. Original Final Completion Date	July 19, 2005
C. Revised Final Completion (Amendment No. 2)	July 19, 2006

This recommendation was considered by the Board of Water Commissioners and action taken as noted below.

BOARD OF WATER COMMISSIONERS:

ACTION: _____

DATE: _____

BY: (b)(6), (b)(7)(C) _____
Director

BACKGROUND

The purpose of Contract No. CS-1368 was to provide as-needed inspection and in-place rehabilitation of existing sewers at a cost of \$50,000,000.00 for a duration of three (3) years on a task order basis. Amendments of the Contract CS-1368 to this date are as given below:

- **Amendment No. 1 (to repair existing sewers on a task order basis)** increased the contract price by \$10,000,000.00 setting a new total contract amount of \$60,000,000.00 with no change in contract completion time.
- **Amendment No. 2 (for repairing a massive sewer collapse at 15 Mile Road between Hayes Road and Moravian Drive in the City of Sterling Heights - Macomb County)** increased the contract price by \$35,000,000.00 setting a new total contract amount of \$95,000,000.00 with twelve (12) months contract time extension.
- **Amendment No. 3 (to complete the collapsed section work of DWSD sanitary interceptor located in Sterling Heights, Macomb County)** increased the contract price by \$23,000,000.00 setting a new total contract amount of \$118,000,000.00.

The proposed Amendment No. 4 is needed to repair sewers and to concentrate rehabilitate efforts on areas of major concern (collapses and breaks) to maintain the flows within the wastewater collection system. In order to maintain the integrity of the sewer system, DWSD accelerated the sewer rehabilitation program by issuing 44 regular task orders and 125 emergency task orders. These tasks used approximately \$57,740,000.00 to repair damaged sewers in the service area [an additional \$2,000,000.00 has already been authorized for cleaning, lining and point repairs for the sewer system].

Furthermore, DWSD is regularly issuing sewer cleaning and lining tasks based on a prioritized sewer section complaint map generated by the Maintenance and Repair Division, while at the same time responding to sewer emergencies as they arise. There are still a significant number of sewer sections requiring rehabilitation according to the prioritized sewer section map. Also, the Wastewater Master Plan report has recommended that 71 miles of sewers should be televised (2.5% of the total system) per year and 25 miles of sewers should be lined (approximately 1% of the total system) per year. Most of DWSD's existing sewers within the City limits were built in the 1920's, and because of age and deterioration of the sewer pipes, immediate repair is often required. Currently, DWSD is spending an average of \$1,600,000.00 per month on sewer rehabilitation work.

In order to continue the rehabilitation work described above at a minimum pace until two (2) new contracts (one (1) for East side and the other for West side sewer lining and repairs) are put in place, it is recommended that Contract No. CS-1368 is amended with additional funds in the amount of \$12,000,000.00 to cover emergency and lining work (40% of the average of last three years of lining work 160,000 LF, which is 64,000 LF per year). This will keep the existing contract in service and provide us enough time to establish two (2) new contracts to replace CS-1368 by July 2006.